Express Mail Label No. EL728730794US
Date of Deposit: August 24, 2001

Attorney Docket No.: 9409/2023D PATENT

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Samson et al.		
U.S. Serial No.:	Not yet assigned	Group:	Not yet assigned
Filed:	August 24, 2001		
Entitled:	ACTIVE AND INACTIVE CC-CHEMOKINE RECEPTOR AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR	Examiner:	Not yet assigned

Box: Patent Application
Commissioner for Patents and Trademarks
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Request to Utilize CRF In U.S. Patent Application No. 09/626,939

Enclosed herewith is a paper copy of the sequence listing as filed in U.S. Patent Application No. 09/626,939, filed July 27, 2000, to which this application claims priority under 35 U.S.C. § 120. Please enter after the last page of the specification and please number the pages as appropriate.

Applicants respectfully request that the electronic copy of the Computer Readable Form (CRF) from the parent application, U.S. Patent Application Serial No. 09/626,939, filed July 27, 2000, to which this application claims priority (and whose specification is identical to the specification of this application), be transferred to this file. Applicants state that the information in the CRF from Application Serial No. 09/626,939 is identical to written sequence listing provided herewith, and that no new matter is introduced by this submission.

In the Specification

Please change the title at page 1 of the specification from, "ACTIVE AND INACTIVE CC-CHEMOKINE RECEPTOR AND NUCLEIC ACID MOLECULES ENCODING SAID

RECEPTOR" to --THERAPEUTIC APPLICATIONS FOR CCR5 CHEMOKINE RECEPTORS--.

At page 1, please delete at the top of the page "VANMA51.001".

At page 1, please delete the text from "BACKGROUND" to "filed March 3, 1997" and insert therefore the following paragraph:

--RELATED APPLICATIONS

This application claims priority under 35 U.S.C. § 120 to U.S. Patent Application Serial No. 09/626,939, filed July 27, 2000, which claims priority under 35 U.S.C. § 120 to U.S. Patent Application Serial No. 08/833,752, filed April 9, 1997, which claims priority under 35 U.S.C. § 119(a)-(d) to EP 96870021.1, filed March 1, 1996, and EP 96870102.9, filed August 6, 1996.--

A marked-up version of page 1 of the specification is attached herewith showing where changes have been made.

In the Claims

Please **cancel** claims **1-38**.

Please **add** claims **39-51**.

39. A method for decreasing the infectivity of a cell expressing a CCR5 chemokine receptor by an HIV virus, said method comprising delivering to said cell a CCR5 chemokine receptor modulator.

40. The method according to claim 39, wherein said CCR chemokine receptor modulator comprises an antagonist of said CCR5 chemokine.

41. The method according to claim 39, wherein said modulator is a polypeptide.

42. The method according to claim 39, wherein said modulator is an antibody.

43. The method according to claim 41, wherein said polypeptide is provided as part of a membrane fraction.

44. The method according to claim 39, wherein said HIV virus is HIV-1 or HIV-2

45. The method according to claim 39, wherein said HIV virus is a macrophage-trophic (M trophic or R5) strain virus.

46. The method according to claim 39, wherein said decreasing of infectivity is monitored by measuring a modification of the signaling activity of said CCR5 chemokine receptor.

47. The method according to claim 46, wherein said measuring of signaling activity comprises measuring of one or more of: changes in levels of cellular acidification, intracellular calcium, IP_3, and stimulation of an intracellular cascade.

48. The method according to claim 39, wherein said decreasing of infectivity is monitored by measuring production of an HIV polypeptide.

49. The method according to claim 48, wherein said HIV polypeptide is p24.

50. A CCR5 chemokine receptor modulator which decreases the infectivity of a cell expressing said CCR5 chemokine receptor by at least two-fold when delivered to said cell.

51. The CCR5 chemokine receptor modulator according to claim 50, wherein said modulator is an antibody.

REMARKS

Upon entry of this amendment, claims 39 to 51 are pending. No new matter is introduced

by this amendment. Support for the newly added claims may be found throughout the specification and at least at page 5, lines 15-31; page 7, lines 14-31; page 8, lines 10-28; page 9, lines 10-24; page 12, lines 11-32 through page 13, lines 1-6; page 26, line 3 through page 28, line 17; page 32, lines 25-30; page 33, lines 14-19; pages 38, line 21, through page 39, line 7; and in Figure 10.

CONCLUSION

Applicants submit that all claims are allowable as written and respectfully requests early favorable action by the Examiner. If the Examiner believes that a telephone conversation with Applicants' attorney would expedite prosecution of this application, the Examiner is cordially invited to call the undersigned attorney of record.

Respectfully submitted,

Date: August 24, 2001

Kathleen M. Williams
Registration No. 34,380
PALMER AND DODGE, LLP
One Beacon Street
Boston, MA 02108
(617) 573-0451

~~VANMIA51,001C1~~

PATENT

~~ACTIVE AND INACTIVE CC CHEMOKINE RECEPTOR AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR~~

THERAPEUTIC APPLICATIONS FOR CCR5 CHEMOKINE RECEPTORS

~~BACKGROUND~~

~~This is a continuation application under 37 CFR 1.53 OF U.S. Patent Application No. 08/810,028 filed March 3, 1997.~~

RELATED APPLICATIONS

This application claims priority under 35 U.S.C. § 120 to U.S. Patent Application Serial No. 09/626,939, filed July 27, 2000, which claims priority under 35 U.S.C. § 120 to U.S. Patent Application Serial No. 08/833,752, filed April 9, 1997, which claims priority under 35 U.S.C. § 119(a)-(d) to EP 96870021.1, filed March 1, 1996, and EP 96870102.9, filed August 6, 1996.

Field of the Invention

The present invention concerns new peptides and the nucleic acid molecules encoding said peptides, the vector comprising said nucleic acid molecules, the cells transformed by said vector, inhibitors directed against said peptides or said nucleic acid molecules, a pharmaceutical composition and a diagnostic and/or dosage device comprising said products, and non human transgenic animals expressing the peptides according to the invention or the nucleic acid molecules encoding said peptides.

The invention further provides a method for determining ligand binding, detecting expression, screening for drugs binding specifically to said peptides and treatments involving the peptides or the nucleic acid molecules according to the invention.

Technological Background of the Art

Chemotactic cytokines, or chemokines, are small signalling proteins that can be divided in two subfamilies (CC- and CXC-chemokines) depending on the relative position of the first two conserved cysteines. Interleukin 8 (IL-8) is the most studied of these proteins, but a large number of chemokines (Regulated on Activation Normal T-cell Expressed and Secreted